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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,289

12/09/2003

Pierre Rieuvonet

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10/31/2005

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EXAMINER

CARPIO, IVAN HERNAN

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,289

Applicant(s)

RIEUVERNET ET AL.

Examiner

Ivan H. Carpio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-16-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 4 is objected to because of the following informalities: "the conductive coating" and "internal walls of passages" lacks antecedent basis. Appropriate correction is required. Examiner interprets claim 4 to mean that the "air conduits" inner walls have a conductive coating formed from one of painting or insertion of a conductive tube held against the internal walls of the conduits.

Claim 9 is objected to because the word "passages" lacks antecedent basis. Appropriate correction is required. Examiner interprets "passages" to mean air conduits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1,2 are rejected under 35 U.S.C. 102(e) as being anticipated by Daoud (US Patent 6781851).

With respect to claim 1 Daoud teaches an electromagnetic absorber (Fig. 1, element 116) for absorbing electromagnetic radiation including a member of foamed

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material (column 5, line 4) having a plurality of air conduits formed therein, which conduits have walls capable of absorbing electromagnetic radiation (Note: Since the entire structure is made of the same material and is an electromagnetic absorber, the walls of the conduits also act as absorbers).

With respect to claim 6 Daoud, teaches an electromagnetic absorber (Fig. 1, element 116) for absorbing electromagnetic radiation including a member of non-conductive material (column 2, lines 61-65) having a plurality of air conduits formed therein, which conduits have internal walls capable of absorbing electromagnetic radiation (Note: Since the entire structure is made of the same material and is an electromagnetic absorber, the walls of the conduits also act as absorbers).

With respect to claim 7 and with all the limitations of claim 6, Daoud teaches that the member is painted with an electrically conductive paint (column 2, lines 61-65).

With respect to claims 5 and 8 and with all the limitations of claim 1 and 6 respectively, Daoud teaches that the internal walls of the passages include an electrically conductive coating (column 2, lines 61-65, its fair to assume that the entire structure is coated including the walls of the passages).

With respect to claims 4 and 9 with all the limitations of claims 1 and 8 respectively, Daoud teaches that the conductive coating is formed from painting (column 2, lines 61-65, its fair to assume that the entire structure is coated including the walls of the passages).

With respect to claim 10 and with all the limitation of claim 1, Daoud teaches that the foamed member is formed from a foamed metal (column 5, line 4).

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With respect to claim 11 and 12 and with respect to claims 1 and 6 respectively, Daoud teaches that the material of the absorber is acoustically absorbing (Note: all materials are acoustically absorbing to a certain degree, including foamed metal).

With respect to claims 13 and 14 and with all the limitations of claim 1 and 6 respectively, Daoud teaches a casing for an electronic device (Fig. 1), the casing including within at least a part thereof an electromagnetic absorber according to claim 1.

With respect to claim 20 Daoud teaches the use in an electromagnetic absorber (Fig. 1, element 116) of one of a foamed member (column 5, line 4) having a plurality of air conduits formed therein and a member of non-conductive material having a plurality of air conduits formed therein, which conduits have internal walls capable of absorbing electromagnetic radiation (Note: Since the entire structure is made of the same material and is an electromagnetic absorber, the walls of the conduits also act as absorbers).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daoud in view of Shastri (US Patent 6471993).

With respect to claim 2 and 3, Daoud teaches all of the limitations including a foamed member (Fig.1, element 116) but does not teach that the foam member is formed from polyurethane to which small particles of carbon are added. Shastri teaches an EMI shield made from polyurethane (column 12, line 30) with particles of carbon (column 23, line 5) added. It would have been obvious to of ordinary skill in the art at the time of the invention to use the composition of polyurethane and carbon, as taught by Shastri, with the electromagnetic absorber, taught by Daoud, because polyurethane is readily available and water-insoluble (Shastri column 7, line 54) and adding carbon particles increases the properties of electromagnetic shielding (column 23, lines 5-9).

Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt (US Patent 6278606) in view of Daoud.

With respect to claim 13 and 14 Schmitt teaches all of the limitations including a casing (fig. 2, element 12) for an electronic device including within at least a part thereof an electromagnetic absorber (Fig.2, element 34 and 36). Schmitt does not teach that the electromagnetic absorber member is of foamed material having a plurality of air conduits formed therein, which conduits have walls capable of absorbing electromagnetic radiation. Daoud teaches an electromagnetic absorber (Fig. 1, element 116) for absorbing electromagnetic radiation including a member of foamed material (column 5, line 4) having a plurality of air conduits formed therein, which conduits have walls capable of absorbing electromagnetic radiation (Note: Since the entire structure is made of the same material and is an electromagnetic absorber, the walls of the conduits also act as absorbers). It would have been obvious to one of

ordinary skill in the art at the time of the invention to make the electromagnetic absorber, taught by Schmitt, with a foamed material and air conduits, as taught by Daoud, because doing so makes the shield lighter and also allows air to penetrate the casing for cooling purposes.

With respect to claim 15 and with all the limitation of claim 13, Schmitt teaches that the casing includes an opening (Fig. 2, the opening covered by elements 34 and 36) and fixtures (Column 2, lines 17-28) for fixing the electromagnetic absorber structure into the opening.

With respect to claim 16 and with all the limitations of claim 13, Schmitt teaches that the electromagnetic shielding is formed integrally with the casing (fig. 2).

With respect to claim 17 and with all the limitation of claim 13, Schmitt along with Daoud teach all of the limitations except that the diameter of the conduits is between 10 and 15 mm. It is well known in the art that the size of the conduits is chosen depending on the kind of EMI involved. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the diameter of the conduits any size, including 10-15 mm, for the purpose of maximizing airflow while at the same time absorbing the damaging EMI involved with the particular device.

With respect to claim 18 and 19 and with all the limitations of claim 13, Schmitt teaches a personal computer with an electromagnetic absorber (fig.2, plus the rejection of claim 13).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Us patent 6349041 discloses a modular card cage with EMI

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shielding, US Patent 6097591 discloses a personal computer with EM absorbing medium.

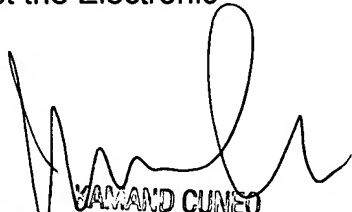
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ivan H. Carpio whose telephone number is 571-272-8396. The examiner can normally be reached on M-R 6:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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